

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1, 3, 11, 18, 20, 22, and 40-43 are presently active. Claims 1 and 18 have been currently amended. Claims 2, 4-10, 12-17, 19, 21, and 23-39 are withdrawn. No new matter was added.

In the Office Action, Claims 1, 3, 11, 40, and 41 were rejected under 35 U.S.C. § 103(a) as being anticipated by U.S. Patent 7,227,097 to Kumar et al. Claims 18, 20, 22, 42, and 42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumar et al in view of U.S. Patent No. 5,556,500 to Hasegawa et al.

Applicants acknowledge with appreciation the courtesy of Examiner Arancibia and Supervisory Patent Examiner Hassanzadeh to interview this case with Applicants' representatives on August 28, 2008 during which time the issues in the Office Action were discussed as substantially summarized hereinafter.

Statement of Substance of Interview and Reasons for Allowance

During the interview, the court cases cited in the outstanding Office Action for intended use limitations were discussed. The Office's position regarding the previously set forth claim elements was clarified

In an effort to expedite prosecution, Claim 1 has been clarified to recite:

1. A processing element for a semiconductor manufacturing system, said processing element comprising:
 - a cylindrical unit including a passive polymeric component and an active component;
 - said cylindrical unit having a first radially-extending surface and a second radially extending surface opposite the first radially-extending surface, wherein an inside diameter of the cylindrical unit forms an opening for disposition of the cylindrical unit around a substrate position in the semiconductor manufacturing system and the second radially extending

surface is a substantially planar surface for disposition on a substrate holder in the semiconductor manufacturing system;

 said passive polymeric component configured to erode when exposed to a plasma process in said semiconductor manufacturing system; and

 said active component included as a part of said passive component and configured to alter the chemistry of the processing when exposed to the plasma process.

The clarified features are supported by Applicants' Figures 1-3 and 7A.

As discussed during the interview, Kumar et al describe at column 10, lines 49-53, that the described passive plasma catalyst can include one or more portions that are for example, substantially spherical, annular, pyramidal, cubic, cylindrical, rectangular or elongated. However, this description in Kumar et al does not anticipate the claimed cylindrical unit having a first radially-extending surface and a second radially extending surface opposite the first radially-extending surface, wherein an inside diameter of the cylindrical unit forms an opening for disposition of the cylindrical unit around a substrate position in the semiconductor manufacturing system and the second radially extending surface is a substantially planar surface for disposition on a substrate holder in the semiconductor manufacturing system.

To assert that Kumar et al anticipate these features would be similar to that *In Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1554 (Fed. Cir. 1997), where the Court found a similar situation in which an anticipation rejection was improperly applied. It stated there that:

Although the Lemelson patent does describe substitution of a balloon for the medicated swab, it does not illustrate this balloon embodiment. Thus, even an artisan of ordinary skill **must guess about how exactly** the balloon would substitute for the medicated swab and whether the resulting balloon catheter would be capable of radial, as well as axial, expansion. In fact, Lemelson makes no suggestion of any kind about its structural suitability for angioplasty procedures. About the most that can be said for the Lemelson patent is that it does not explicitly describe anything inconsistent with angioplasty procedures. However, this negative pregnant is **not enough to show anticipation.** [Emphasis added.]

Here, the vaguer description in Kumar et al leaves one to only guess as to how exactly the passive plasma catalyst portions would be formed with respect to one another.

Hence, independent Claim 1 patentably defines over Kumar et al. Thus, Claim 1 and the claims dependent therefrom (including the withdrawn claims) should be passed to allowance.

Similarly, independent Claim 18 has been clarified to recite:

18. A semiconductor manufacturing system for processing a substrate using a plasma process, comprising:
 - a processing chamber configured to facilitate said plasma process;
 - a substrate holder coupled to said processing chamber and configured to support said substrate;
 - a gas distribution system coupled to said processing chamber and configured to introduce a process gas to said processing chamber;
 - a plasma source coupled to said processing chamber and configured to generate a plasma in said processing chamber;
 - at least one processing element coupled to at least one of said processing chamber, said substrate holder, said gas distribution system, and said plasma source; and
 - said at least one processing element comprising,
 - a cylindrical unit including a passive polymeric component and an active component,
 - said cylindrical unit having a first radially-extending surface and a second radially extending surface opposite the first radially-extending surface, wherein an inside diameter of the cylindrical unit forms an opening for disposition of the cylindrical unit around a substrate position in the semiconductor manufacturing system and the second radially extending surface is a substantially planar surface for disposition on a substrate holder in the semiconductor manufacturing system,
 - said passive polymeric component configured to erode when exposed to a plasma process in said semiconductor manufacturing system, and
 - said active component included as a part of said passive component and configured to alter the chemistry of the processing when exposed to the plasma process.

As discussed during the interview, Applicants had previously overcome Hasegawa et al by defining that the active component was included as a part of the passive component. During the interview, it was pointed out that Hasegawa et al's teaching of a two-component

focus ring was a *teaching away* from having an active component included as a part of the passive component.

Following the interview, a more thorough analysis (provide below) of the two-component focus ring teaching of Hasegawa et al shows that a modification of Hasegawa et al to include both passive and active components into a single focus ring would render Hasegawa et al unsuitable for its intended purpose.

For example, Hasegawa et al describe at column 9, lines 35-51:

As has been described above, the in-plane uniformity of etching characteristics such as etching rate and etching anisotropy can be improved by employing the focus ring 102 comprising a compound structure of inner and outer parts 104 and 106 and selecting the specific materials of the inner and outer parts. The inner part is formed of an electrically conductive material, e.g. amorphous carbon, which causes substantially no reaction product by contact with an etching gas, or an electrically conductive material which does not cause, at least, any reaction product which is substantially adsorbed on an etching target, by contact with an etching gas. The outer part is formed of a material containing a component which is a main component of the etching target and causes such a reaction product as to be substantially adsorbed on the etching target by contact with an etching gas, preferably, a metallic material.

Thus, the intended purpose of Hasegawa et al is to provide separate focus ring parts with the inner part being formed of a non-process gas reactive component and the outer part being formed of a main component of the etching target. Indeed, Hasegawa et al describe at column 9, lines 29-34, that there are preferred ratios for the radial width of the outer part as compare to the radial width of the inner part. Thus, to replace the two-component focus ring of Hasegawa et al with a single focus ring element would defeat the purpose of the separated focus ring components (i.e., to improve etching uniformity by selective absorption of a reaction product of the etching on the outside peripheral ring as compared to the inner ring).

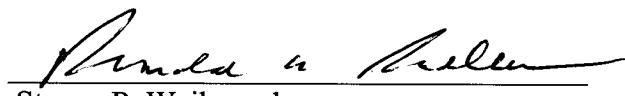
Accordingly, it is requested that independent Claim 18 and the claims dependent therefrom (including the withdrawn claims) should be passed to allowance.

Conclusion:

In light of the above discussions, the outstanding grounds for rejection are believed to have been overcome. The application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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